

**Amendments to the Claims:**

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Previously Presented) A method for transmitting audio information, comprising:

receiving at least two audio signals, the audio signals comprising different audio information;

synthesizing a carrier signal and at least two side band signals;

encoding the at least two side band signals with different ones of the different audio information;

transmitting the carrier signal and the encoded side band signals to a plurality of transducers;

transmitting the carrier signal and the encoded side band signals from the plurality of transducers; and

actively adjusting a phase of the carrier signal and the encoded side band signal transmitted by at least one of the transducers relative to a phase of the carrier signal and the encoded side band signal transmitted by at least one other of the transducers for the purpose of controlling the directivity or focus of at least two hypersonic beams produced by the transducers, wherein

at least two of the hypersonic beams produce different auditory signals, the auditory signals corresponding to different ones of the audio signals.

2. (Currently Amended) The method of claim 1, further comprising:

generating a plurality of signals based on the encoded side band signals and the carrier signal;

adjusting phase relationships of the plurality of signals to form the focused hypersonic beams; and

generating hypersonic wavelets, each of the wavelets ~~generated based on one of the~~  
comprising a combination of the carrier and encoded side band signals.

3. (Previously Presented) The method of claim 1, further comprising:  
selecting one or more carrier signals;  
encoding one side band signal with unique audio information for each of the carrier signals; and  
transmitting the carrier signals and encoded side band signals in the at least two hypersonic beams, each of the hypersonic beams aimed at a different direction than other one of the hypersonic beams.

4. (Original) A computer readable medium or a modulated signal being encoded to perform the method of claim 1 in conjunction with a hypersonic transducer.

5-18. (Cancelled)

19. (Previously Presented) A hypersonic transducer, comprising:  
means for synthesizing a carrier signal and at least two side band signals encoded with different audio information;  
means for transmitting the carrier signal and the encoded side band signals to a plurality of transducers;  
means for transmitting the carrier signal and encoded side band signals from the plurality of transducers, the transducers outputting at least two hypersonic beams that produce different auditory signals corresponding to different ones of the different audio information; and  
means for actively adjusting a phase of the carrier signal and the encoded side band signals transmitted by at least one of the transducers relative to a phase of the carrier

signal and the encoded side band signal transmitted by at least one other of the transducers for the purpose of controlling the directivity or focus of the hypersonic beams produced by the transducers.

20. (Cancelled)

21. (Previously Presented) A hypersonic transducer system for transmitting audio information with hypersonic beams, the system comprising:

at least one transducer array, each transducer array comprising a plurality of transducers;

two or more audio sources, each audio source outputting a corresponding audio signal;

at least one means for generating a carrier signal;

at least one means for generating a sideband signal encoded with at least one of the audio signals;

a plurality of signal conditioning circuits;

a plurality of delay circuits;

a plurality of drive circuits that drive the transducers; and

at least one controller that controls generation of input signals for the drive circuits, the input signals being generated from the at least one carrier signal and the at least one sideband signal, wherein

the controller controls the signal conditioning circuits to adjust amplitudes of the input signals, and controls the delay circuits to adjust delays of the input signals so that the at least one transducer array outputs at least two hypersonic beams focused to deliver different audio information to different audio information recipients.

22. (Previously Presented) The system of claim 21, wherein the audio sources include a first audio source outputting a first audio signal that includes first audio information targeted to a first audio information recipient and a second audio source outputting a second

audio signal that includes second audio information targeted to a second audio information recipient, the first and second audio information being different.

23. (Previously Presented) The system of claim 22, wherein the transducers of the at least one transducer array are grouped into subarrays of transducers, the transducers of each subarray receiving the same drive signal.

24. (Previously Presented) The system of claim 23, wherein each hypersonic beam is produced from the outputs of two of the subarrays of transducers, the output of one of the subarrays of transducers being based on the carrier signal, the output of the other of the subarrays of transducers being based on a corresponding sideband signal encoded with audio information.

25. (Previously Presented) The system of claim 23, wherein each hypersonic beam is produced from the output of at least one of the transducers, the output of the at least one of the transducers being based on the carrier signal and a corresponding sideband signal encoded with audio information.

26. (New) The method of claim 1, further comprising:

- determining, for each of the at least two audio signals, at least one audience target area where the audio signal is to be reproduced;
- determining, for each of the plurality of transducers, delays for the carrier signal and each of the at least two encoded side band signals;
- combining, for each of the plurality of transducers, the corresponding delayed carrier signal and the corresponding delayed at least two encoded side band signals into a combined signal,
- wherein said step of transmitting the carrier signal and the encoded side band signals to a plurality of transducers comprises transmitting each of the combined signals to a corresponding one of the plurality of transducers,

wherein said step of transmitting the carrier signal and the encoded side band signals from the plurality of transducers comprises transmitting each of the combined signals from a corresponding one of the plurality of transducers, and

wherein the combined signals transmitted by said plurality of transducers produce a plurality of wavelets that interact to produce the at least two hypersonic beams that in turn reproduce the audio signals at the corresponding at least one audience target area.